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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/655,881   | 09/06/2003  | Karl Gierachf        | 19001/003            | 7183             |
| 35070  | 7590        | 10/18/2005           | EXAMINER             |                  |
| ANATOLY S. WEISER, ESQ<br>674 VIA DE LA VALLE<br>SUITE 216<br>SOLANA BEACH, CA 92075 |             |                      | BRINEY III, WALTER F |                  |
|  |             |                      | ART UNIT             | PAPER NUMBER     |
|  |             |                      | 2646                 |                  |

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                      |  |                |  |
|------------------------------|----------------------|--|----------------|--|
| <b>Office Action Summary</b> | Application No.      |  | Applicant(s)   |  |
|                              | 10/655,881           |  | GIERACHF, KARL |  |
|                              | Examiner             |  | Art Unit       |  |
|                              | Walter F. Briney III |  | 2646           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-9 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 13 and 19 is/are allowed.
- 6) ☒ Claim(s) 3, 5-9, 12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*ay*

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 3, 5-7, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien (US Patent 6,601,031) in view of Krack (US Patent Application Publication 2003/0021394).**

**Claim 3** is limited to *a voice command (VC) to dual tone multi-frequency (DTMF) interfacing system*. O'Brien discloses a speech recognition front-end controller to voice mail systems. See Abstract. In general, the system (40) of O'Brien, as depicted in figure 3, converts voice commands input by a telephone user (2) into appropriate DTMF commands associated with corresponding functions of a voice mail system (5). The speech recognition system (4) includes means for performing conversion or *translation*. However, O'Brien is silent concerning transmission details, focusing mostly on the speech to DTMF conversion. Therefore, O'Brien anticipates all limitations of the claim with the exception of a *first and second echo canceller*.

Krack teaches a system similar to O'Brien, as seen in figure 1. Krack further teaches that echo effects the operation of the system because messages from the voice mail system can be reflected and misinterpreted as commands to the speech recognizer and spoken commands from a user can be reflected creating the annoyance of hearing

Art Unit: 2646

one's own voice reflected back. See paragraph 41. In solution, Krack performs echo cancellation on both channels, inherently requiring a *first* and *second echo canceller*.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a first and second echo canceller as taught by Krack for the purpose of removing reflections that cause unintentional voice recognition commands to be executed and annoying echo.

As stated in column 2, lines 11-13, the system of O'Brien does not implement a standard hairpin connection since the speech recognition system maintains control over the connection. In particular, the speech recognition selectively couples and decouples the speech path of the telephone user (2) from the voice mail system (5), as shown in step 11 of figure 6, when the user wishes to directly communicate with the voice mail system, i.e. the speech recognition serves as a *port patch for connecting the first port directly to the second port in a second mode*. Therefore, O'Brien in view of Krack makes obvious all limitations of the claim.

**Claim 5** is limited to *the system according to claim 3*, as covered by O'Brien in view of Krack. As seen in steps 13 and 14, the system of O'Brien is responsive to a predetermined DTMF symbol entered by the telephone user (2). The DTMF symbol causes the speech recognition system to decouple the voice path between the user (2) and voice mail system (5), i.e. *switch to the first mode*. Therefore, O'Brien in view of Krack makes obvious all limitations of the claim.

**Claim 6** is limited to *the system according to claim 3*, as covered by O'Brien in view of Krack. As shown above in the rejection of claim 5, O'Brien discloses means to

Art Unit: 2646

receive a DTMF signal at the speech recognition system (40) from the telephone user (2), and because the speech path of the user (2) is connected directly to a voice mail system in a *second mode*, DTMF codes are forwarded directly from the user (2) to the voice mail system (5), i.e. *forward DTMF codes to the DTMF-driven system when voice commands are not used*. Therefore, O'Brien in view of Krack makes obvious all limitations of the claim.

**Claim 7** is limited to *the system according to claim 3*, as covered by O'Brien in view of Krack. Figure 6 depicts forwarding user speech directly to the voice mail system (5) when the user wishes to record a message in the voice mail system (steps 11-13), i.e. *during the second mode, the audio is a voice message to be stored in a voice mailbox of the DTMF-driven system*. Previous steps 1-9 illustrate the method of retrieving a previously stored message from the voice mail system (5), i.e. *during the first mode, the voice message stored in the voice mailbox can be retrieved*. Therefore, O'Brien in view of Krack makes obvious all limitations of the claim.

**Claims 12 and 14** recite essentially the same limitations as claims 3 and 5, respectively, and are rejected for the same reasons.

2. **Claims 8, 9, 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Krack and further in view of Lane (US Patent 6,757,379).

**Claim 8** is limited to *the system according to claim 3*, as covered by O'Brien in view of Krack. Clearly illustrated in figure 3 of O'Brien is an automatic speech recognition detector, labeled ASR/DTMF DETECT. While O'Brien further depicts the DTMF OUT module in figure 3, there is no discussion concerning its method for

generating DTMF signals. Therefore, O'Brien in view of Krack makes obvious all limitations of the claim with the exception of *a plurality of audio files, each audio file corresponding to a DTMF tone*.

Lane teaches an apparatus for the attachment of a computer to a telephone set, and a computer comprising the same. See Abstract. While not specifically directed toward a network based interface such as O'Brien, the apparatus taught by Lane includes automatic DTMF generation for control of a voice mail system by way of a plurality of stored audio files. See column 5, lines 42-57. In particular, Lane suggests generating a sequence of DTMF tones from audio files, which suggests that each tone is stored in a separate file. Furthermore, the DTMF generator of Lane is implemented within a computer allowing integration with existing components of O'Brien. Because Lane stores each DTMF in separate files, *plural files* must inherently be played in order to command the voice mail system (5) of O'Brien in response to a user's input, i.e. a *distinct ordered combination of the plurality of audio file is associated with each voice command*.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement a digital DTMF generator as taught by Lane because O'Brien fails to disclose the structure of a DTMF generator and because the digital DTMF generator of Lane can be integrated using only software, reducing the overhead of peripheral processors.

**Claim 9** is limited to *the system according to claim 8*, as covered by O'Brien in view of Krack and further in view of Lane. Clearly, the DTMF generator taught by Lane

corresponds to a *DTMF audio file player*. Therefore, O'Brien in view of Krack and further in view of Lane makes obvious all limitations of the claim.

**Claims 17 and 18** recite essentially the same limitations as claims 8 and 9 respectively, and are rejected for the same reasons.

3. **Claims 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien in view of Krack and further in view of Gupta et al. (US Patent Application Publication 2002/0090066).

**Claim 15** is limited to *the method according to claim 12*, as covered by O'Brien in view of Krack. The system of O'Brien merely provides the ability to disable the port patch in response to a DTMF signal from the user (2). Therefore, O'Brien in view of Krack makes obvious all limitations of the claim with the exception of *detecting a predetermined keyword in the second mode from the caller to disable the port patch*.

Gupta teaches a voice-operated interface for DTMF-controlled systems. See Abstract. In one embodiment, hands-free control is provided between a user (12) and a DTMF-controlled system (24). Gupta teaches that during a period where the DTMF-controlled system is recording the user's voice, a user's voice utterance will be scanned for a command to further control the DTMF-controlled system. See paragraph 25. In contrast, the system of O'Brien requires a user to terminate a call using the DTMF key '#'. See steps 13-15 of figure 7. It is clear that the teachings of Gupta offer the advantage of full-time handsfree operation whereas the teachings of O'Brien only offer part-time handsfree operation that still require occasional DTMF input from the user. It would have been obvious to one of ordinary skill in the art at the time of the invention to



include voice command responsive means as taught by Gupta so that full-time handsfree operation is achieved within the system of O'Brien.

**Claim 16** is limited to *the method according to claim 15*, as covered by O'Brien in view of Krack and further in view of Gupta. Figure 6 depicts forwarding user speech directly to the voice mail system (5) when the user wishes to record a message in the voice mail system (steps 11-13), i.e. *during the second mode, the audio is a voice message to be stored in a voice mailbox of the DTMF-driven system*. Previous steps 1-9 illustrate the method of retrieving a previously stored message from the voice mail system (5), i.e. *during the first mode, the voice message stored in the voice mailbox can be retrieved*. Therefore, O'Brien in view of Krack makes obvious all limitations of the claim.

#### ***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

4. **Claims 4, 13 and 19 are allowed.**

**Claims 4 and 13** were objected to as containing allowable subject matter but depending on a rejected base claim. As these claims have been rewritten to include all limitations of the rejected base claim and any intervening claims, they are allowable.

**Claim 19** recites the same allowable limitations as claims 4 and 13, and is allowable over the cited prior art for at least the same reasons.



***Response to Arguments***

Applicant's arguments filed 13 June 2005 have been fully considered but they are not persuasive.

**With respect to claim 3**, the applicant alleges on page 11 of the current response that O'Brien does not disclose, teach or suggest that the voice path goes directly between the two ports of the SRS; the examiner respectfully disagrees. The claim recites, "a port patch for connecting audio from the first port directly to the second port in a second mode," which means, a port patch provides the direct connection. As noted in the preceding section, the system of O'Brien clearly provides connection between the input port and output port of the speech recognition system (40). It is further noted that some type of hardware inherently exists for routing voice from one port to another. The beginning and end of this hardware corresponds at least to the port patch as claimed because the claim simply does not limit the construction of this port patch. Therefore, it is submitted that the beginning of the prior art port patch is at the input port of the speech recognition system connected to the user (2) and the end is at the output port of the speech recognition system that is connected to the voice mail system (5). As all of the applicant's arguments regarding claim 3 have been shown to be either moot or unpersuasive, the rejection of this claim is maintained.

**With respect to claim 12**, the applicant alleges on page 11 of the current response that this claim is allowable for at least the same reasons as claim 3; the examiner respectfully disagrees. As all of the applicant's arguments regarding claim 3 have been shown to be either moot or unpersuasive, and no further arguments are

Art Unit: 2646

provided with respect to the patentability of this claim, the rejection of this claim is maintained.

### ***Conclusion***

The new grounds of rejection with respect to claims 8, 9, 17 and 18 were not necessitated by applicant's amendment, and therefore, this action is **NON-FINAL**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F. Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**

WFB  
10/11/05